Remarks on Mercury by David Hunter of Virginia

Passed March 30th 1824
W. R. H.
Dean

"Felix qui potuit medium cognoscere tutum".

Perhaps there is not a substance
known in the materia medica of the Materia
Medica, that is so generally used
or so greatly abused, Turpentine is more
important perhaps, in its numerous
combinations as Medicine. Among the
numerous diseases to which the human
species is subject, there is scarcely an
exception in which this medicine
in some one shape or other, has not
been found serviceable. It may indeed
before its introduction into practice
seem marked among the opprobrium
Medicorum, have been deemed peculiarly
amenable under its influence
in the cases of persons subject
or inclined to hysteric attacks, or
as some to extend are pain set
over the table, it put on by stomach
invaded, but it is in true pain, mean

Perhaps
dicine,
Medica,
n so gr
importan
ombinat
numerou
pecies is
exception
in some
been fou
before its
were re
Medicore
Tractabe
In the c
culiar
as some
are lia
rivaled,

Perhaps there is not an individual medicine in the whole range of the Materia Medica, that is so extensively used, or so greatly abused, & answers so many important purposes, in its various combinations as Mercury. Among the numerous diseases, to which the human species is subject, there is scarcely an exception in which this medicine, in some one shape or other, has not been found serviceable; & many which before its introduction into practice, were ranked among the opprobria Medicorum, have since become quite tractable under its influence.

In the cure of several maladies peculiar to tropical climates, as well as some to which we ourselves are liable, it not only stands unrivaled, but is a sine qua non,

notwitt
& futile
to bring
actuated
tives, o
=ber thro
particu
=ploym
W
metal,
=id form
mean's,
usually
lour, r
melted
perfect
white;
in the e
rarely i
combined

notwithstanding the many abortive & futile attempts, that have been made to bring it into disrepute, by a few actuated doubtless by laudable motives, but by far the greater number through ignorance & prejudice, particularly as it regards its employment in syphilitic affections.

What word?

Mercury or quicksilver is a metal, existing naturally in a fluid form, but can by artificial means, be rendered solid, as it is usually seen, of a grey opake colour, resembling in appearence melted tin, or lead; but when perfectly pure, of a bright white; it is met with imbedded in the earth, sometimes though rarely in virgin state, but generally combined with foreign substances,

It perhe
the pow
others, o
part of
mines h
Spain,
It wh
was fo
certain
of ancie
to have
as a fo
with,
used it in
bed to
however
day, m
at that
or cart
in the pa

& perhaps oftener with sulphur, under the form of native cinnabar, than any other, It is found in almost every part of the world, the principal mines however are those of Germany Spain, & Peru.

At what particular period mercury was first discovered, we have no certain knowledge. The physicians of ancient Greece & Rome, are said to have been acquainted with it, only as a poison too dangerous to meddle with. The credit of having first used it in the cure of disease is ascri= bed to the Arabians, a people who however degenerate at the present day, were probably more enlightened at that period, than any nation on earth. They employed it externally in the form of ointment in various

cutaneo
ep terwa
but li
incomb
vity, p
quence
Exhibite
the prave
operatio
disease.
sometime
Europe,
latter e
safe
mitted
In the
trol
was al
the mo
annals

cutaneous affections. Large doses were afterwards given in the crude state, but like most other metals when uncombined, it acted only by its gra=vity, producing no deleterious conse=quences. To which practice succeeded the exhibition of certain pharmaceutical preparations, more powerful in their operation, & more effectual in checking disease. It was not however until sometime after its introduction into Europe, which is dated about the latter end of the 13th century, esteemed a safe medicine, or regularly ad=mitted into the Materia Medica. In the following century its con=trol over the Venereal virus was observed, which is probably the most important discovery, the annals of Medical science afford.

The repu
its firs
on a fe
fluctua
are so
sent da
as fully
by wh
of its
et egreg
The mo
when i
system,
heart &
crease of
in genera
directed
another
pending
the quan

The reputations of the medicine from its first introduction, until within a few year's, has been extremely fluctuating, Its curative qualities are so highly estimated at the present day, when judiciously directed, as fully to deserve the appellation by which it was designated, by one of its earliest advocates, of, Mirabilis et egregia medicina.

The most usual effects of Mercury when introduced into the human system, are, an increased action of the heart & arteries, together with an increase of the secretions & excretions in general. Its action is sometimes directed to one part, sometimes to another, & often to every part, depending in a great measure upon the quantity & quality exhibited.

its sensib-
formly e
of the v
part, p
=tion; u
by first
a tender
of prune
=pearan
of the
of saliv
ulcers i
together
throughou
tion is th
such ar
of merc
=duced
which c
few weeks

Its sensible effects are however more uniformly exerted upon the salivary glands of the mouth, than upon any other part, producing ptyalism or salivation; which symptom is characterised by first, a metallic taste in the mouth a tenderness of the gums, which assume a whitish & spongy appearance, a very peculiar fetor of the breath, an unusual secretion of saliva, & very frequently small ulcers in various parts of the mouth together with some degree of irritability throughout the whole body; the system is then said to be mercurialized. Such are the most usual effects of mercury, when cautiously introduced & left off in due season, which commonly disappear in a few weeks, without leaving behind

any p
constr
=d t
after
if it
or re
a-lars
will
lips,
degree
in eve
germs
=come
fall
off,
of eve
until
in othe
effects
been

any permanent derangement of the constitution. If however it be push=ed to a greater extent, by continuing after the above has taken place, or if it be administered in too large or repeated doses, a train of very alarming & distressing symptoms will occur; the tongue, gum's lips, cheeks, &c, swell to a frightful degree, extensive ulcerations form in every part of the mouth, the gum's bleed profusely, the teeth be=come loose, black, & occasionally fall out, the jaws mortify, slough off, with debility & emaciation of every part, which continue until death closes the scene. & in other cases where the pernicious effects of the medicine, have not been carried quite so far, it not

unpreque
of it,
of com
a you
nordin
n a t
twisted
to che
at the
the ve
the at
of sep
of wedges
to bring
then y
from
so cle
alterin
degree
tinctly

unfrequently incapacitates the subject of it, from enjoying any degree of comfort during life. I know a young lady whose mouth from inordinate doses of Calomel taken in a bilious fever, was so much twisted to one side, as entirely to change her features; & who at the present day (which is twelve or eighteen months since the attack) is under the necessity of separating her jaws by means of wedges, sometime previous to taking her meals; I also another young lady, whose tongue from the same cause, adheres so closely to the adjacent parts altering her voice to such a degree, that she can be but indistinctly understood, by her

most in
both of t
doses flo
& the com
of coun
circumst
the gum
from ov
is, as po
slightly
subject
time pac
cases 12
= harged
attended
secretion
pator op
the mean
indicati
the whol

most intimate acquaintances. In both of the above cases, large & frequent doses of calomel, had been administered; & the common symptom in the section of country where I reside, under such circumstances, of profuse bleeding of the gums, was present; An effect from over doses of calomel, which is, as far as I am acquainted but slightly mentioned by authors on the subject; it is preceded by redness & tumefaction of the gums, in violent cases 12 or 16 ounces of blood, are dis=charged, in the twenty four hours, attended with a comparative small secretion of saliva, but intolerable fetor of the breath; The pulse in the mean time, is feeble & irritable, indicating great derangement of the whole system. There is also

another
the above
mention-
namely
black,
none of
Alley,
general
the body
part,
Wilson
a occu
several
observed
eruptio
called
They a
symptom
have bee
as I ne

another effect which often accompanies the above, & which I have never seen mentioned, as induced by mercury, namely a species of Petechiæ, or small black, circumscribed spots, answering none of the eruptions described by Alley, Spens, Person &c; appearing most generally on the superior parts of the body, but occasionally on every part, The same is mentioned by Wilson Philip, in his work on fever as occuring in the plague, as well as several other diseases of debility. He observes that it is this particular eruption, which by some has been called tokens, or God's token, & that they are regarded as a very fatal symptom; those which I have seen have been invariable tokens of death, as I never knew an instance of recovery

after the
as well
bilious p
the disea
them; &
mercury
that the
deal of
Not an
=ng from
bowel c
=pained
whether
external
syphili
is very
nearly
a imag
from th
those in

after their appearance, It may be as well to mention, that the common bilious fever of Berkeley County is the disease, in which I have noticed them; & that they are produced by mercury is evident from the fact, that they only occurred where a great deal of that mineral had been given. Not an uncommon consequence arising from mercury, is a disagreeable bowel complaint, occasionally accompanied with discharges of blood, whether the medicine be given, either externally or internally. The cure of Syphilis under such circumstances is very troublesome. There are indeed nearly as many diseases, either real or imaginary, enumerated, as arising from the action of this medicine, as those in which it is employed to

ure; a
=ed, dro
all the
of imp
=ening
=branch
of ind
kind
=lar to
of a s
ularly
has att
in Eur
styled
have tr
which
country
Merc
most of
when p

cure; among which may be reckon=ed, dropsy, tremors, paralysis, nearly all the terminations of the first stage of inflammation; such as the thick=ening & adhesions of various mem=branes, most of the symptoms of indigestion, incurable mania, a kind of hectic fever, pains simi=lar to those of rheumatism, nodes of a scrophulous nature, & partic=ularly a peculiar eruption, which has attracted considerable attention in Europe of late years; differently styled by the different authors who have treated on the subject. a disease which very seldom occurs in this country from the above cause.

Mercury as before stated, like most of our valuable remedies, when pushed beyond a certain

extent,
poisono
=naged
so as to
influen
of the
any oth
believe
The tre
pects, a
course,
has bee
long pr
vided i
the sys
second,
tution
the me
In the
have n

extent, frequently becomes highly poisonous; but that it can be ma=
=naged when judiciously directed so as to exert a more powerful influence, & that influence too of the most salutary kind; than any other article we possess, is I believe generally admitted.

The treatment for the morbid effects, arising from a mercurial course, in which the medicine has been too freely used, or too long persevered in, may be divided into two parts: first where the system has been surcharged, second, that state of the constitution immediately succeeding the mercurial excitement. In the former we, unfortunately have no corrective, that can

at all
the diffe
& particu
have bee
rations
proposed
of the
quietly
any thin
=ver sh
diet, hi
open air
=ter, or so
opium be
relieving
irritabil
=plaint
=posed to
exercise,
proposed,

at all be relied upon; blisters, the different preparations of sulphur, & particularly sulphure water, have been recommended; the preparations of lead have of late been proposed, from the morbid effects of the latter article, being more quietly relieved by mercury, than any thing else. The patient however should be kept on a low diet, his bowels should be kept open with sulphur & cremortartar, or some other laxative, and opium be given with a view of relieving pain, & that peculiar irritability attending the complaint; he should also be exposed to cool air, & take moderate exercise, many gargles have been proposed, when the mouth is much

affected,
with co
good, as
second st
under o
most oth
the stom
such me
as will
organ, &
is genera
to answe
-table t
rations g
have bee
several c
-ving bee
was pol
of the b
similar

affected, keeping that part clean with cool water, is, I believe as good, as any of them. As for the second stage, it is to be managed under ordinary circumstances, like most other states of debility; & as the stomach particularly suffers, such medicines should be selected, as will increase the tone of that organ, & improve the appetite; which is generally very much impaired; to answer which, many of the vege-table tonics, the various preparations of iron, & the mineral acids have been advised. I have seen in several cases, where the system having been very violently excited, was followed by a torpid state of the bowels, connected with a similar condition of the liver,

which
-nances, entirely
such c
sulphur
-ductive
moderate
a - the
laxative
Natu
-red dy
appearance
-ject is
it is a
is pulley
condition
from i
appearance
drawn p
the dete
of the

which last organ had to all appearances, entirely ceased secreting bile; under such circumstances, the golden sulphur of antimony was productive of the very best effects, moderately exciting the liver, & at the same time proving gently laxative.

Notwithstanding the many learned dissertations on the modus operandi of mercury, the subject is still very obscure; that it is absorbed into the circulation is fully proved, from various conditions of the system arising from its exhibition; such as the appearance of the blood ~~drawn~~ drawn from a mercurialized patient, the detection of it in several parts of the body, the exhalation of it

from t
the me
commu
the sec
ction
=gative
as man
the ne
eviden
most p
sefs, &
the hig
quired
those v
peculia
may be
=ng to
No e
which
would

from the skin, & above all, from the mercurial impression being communicated, from the mother to the sucking infant. Its local action is evinced from its purgative & emetic qualities, as well as many other. Its action upon the nervous system is equally evident. I believe it to be the most permanent stimulus we possess, & I would ask whether or not the high reputation it has acquired in the management of those violent & rapid affections peculiar to tropical climates, may be, in a great measure owing to this quality?

To enumerate the diseases in which mercury has been employed would be to repeat the whole

nosolo
its im
syphil
disp
& every
disease
out m
by the
as jea
patien
ble in
portan
all the
cases o
are rec
by mer
is, that
were o
jected,
the stom

nosology from beginning to end. Its influence in subduing the syphilitic virus has held un=disputed sway, for a long time; & every attempt to cure that disease at the present day, with=out mercury, is looked upon by the most enlightened physicians, as jeapardising the life of the patient. It is equally indispensa=ble in the diseases of that im=portant viscus the liver, as also all the abdominal viscera.
Cases of tubercular consumption are recorded to have been cured by mercury, but the presumption is, that the lungs in such cases were only sympathetically af=fected, from a morbid state of the stomach, liver, spleen &c, or

That the
bronchite
be whe
consump
any me
Mercury
confined
chronic
years i
managem
has adr
pace, &
all othe
in seve
Dr Hami
laid do
be obser
a mercu
important
to, when

that they were cases of chronic bronchitis; as it is very questionable whether genuine tubercular consumption was ever cured by any means.

Mercury for a long time was confined nearly exclusively to chronic complaints, but of late years its reputation in the management of acute affections has advanced at a very rapid pace, & in fact has superseded all other plans of treatment in several of the latter.

Dr Hamilton of Edenburgh has laid down a set of rules, to be observed while undergoing a mercurial course; which are important, & should be attended to; when the circumstances and

situa-
mit o-
-ly so
the e-
impro-
-ous
such
nate
little
attend
of hu
ever
reverr
tent
should
-tity
purga
ovus
should
-gains

situation of the person will admit of it; but it very frequently so happens, particularly in the country, that we find it impracticable to subject persons requiring the remedy, to such restrictions; it is fortunate in such cases, that but little inconvenience generally attends the disregarding of many of his rules. There are however several of them, which should never be omitted; viz, if the patient be robust & plethoric, he should lose a considerable quantity of blood & take a cooling purgative, before commencing the course; & during its continuance should particularly guard against taking cold; live on a

low d
of stim
medicin
troduce
as the
-fected
of nec
the con
unpaw
When
habit
-tural
deple
of on
fiend
survia
The sy
resistan
-ency,
are in

low diet, & abstain from all kinds of stimulating food & drink. The medicine should be gradually introduced, & discontinued as soon as the mouth is moderately affected, & afterwards resumed if necessary, rather than, render the constitution liable to be impaired by a surcharge,

During its exhibition, if the habit of body be above the natural standard at any time, depleting measures should be resorted to; if on the other hand debility prevails, opium, wine, the peruvian bark &c, are to be used.

The system occasionally offers a resistance to the operation of mercury, when neither of the above are in a great degree present;

under
warm
cause
are ad
that
of Me
been t
years,
great
the fr
calom
the tr
diseas
use of
= fecu
= tent f
= fant
Mer
in its
it ha

under such circumstances, the warm bath, & particularly nauseating doses of antimony are advised. I may here remark that my preceptor, Dr Harrison of Martinsburg, Virginia, has been ~~been~~, for a number of years, in the habit, & with very great advantage, of combining the pulvis antimonialis with calomel in active doses, in the treatment of almost every disease, which required the use of this latter article; es= =pecially in bilious & intermit= =tent fevers, croup, cholera in= =fantum, worms, & dysentery.

Mercury as before mentioned in its metallic state is inert, it has however heretofore been

= gov
= nate
of opre
= rty;
but le
= ent
variety
have b
The fa
= portan
the pro
The ne
& the
The bl
metal
with
= ert f
gentle
is desi
= ble to

a good deal employed, in obsti=
=nate constipations, with a view
of opening a passage by its gra=
=vity; the practice, I believe is
but little pursued at the pre=
=sent day, Therefore a great
variety of chemical preparations
have been devised; among which
the following are the most im=
=portant, the Two black oxyds,
the protochloride, the perchloride,
the nitric oxyde, the phospat,
& the red sulphuret.
The blue pill, in which the
metal is partially combined
with oxygen, is one of its mild=
=est preparations; & where a
gentle mercurial impression
is desired is generally prefera=
=ble to any other; it will however

operat
in su
the o
tal
tain
able
cine,
sirab
in a
some p
for bi
usual
cordin
less y
stoma
bearin
sions.
most o
appeti
Calom

operate on the bowels, if given in sufficient quantity.
The ointment, in which the metal is also oxydized to a certain degree, is a highly valuable form for using the medicine, especially when it is desirable to impregnate the system in a very short time, or where some peculiarity of the primæ viæ forbids its employment in the usual manner; as the skin according to Mr Hunter is much less essentiae to life than the stomach, & is also capable of bearing much stronger impressions. It is also used with the most decided benefit, in many affections of the skin.
Calomel admits of a more extensive

pplicat
mploy
icm, th
ations
rialap
urgat
tary ca
, equa
where
The
precipu
to the
lilicat
ighly
authors,
either a
arsapa
Cather
seen a
& bowe

application, & is probably more employed in the practice of physicians, than all its other preparations put together; either as a sialagogue, an alterant, or a purgative; cleansing the alimentary canal, correcting the secretions, & equalizing the circulation, where such effects are required.

The corrosive sublimate, & red precipitate are of most importance to the surgeon, for topical applications. The former is however highly recommended by some authors, in both stages of syphilis, either alone, or combined with sarsaparilla & guaiacum; the latter (red precipitate) I have seen agree with the stomach & bowels, when neither calomel

or the
The
expe
unli
Ted
of
the
ses.
The
compl
being
mega
advis
throat
ulcer
for
been
No
been
of mo

or the blue pill would.

The phosphat is a very powerful preparation, & not unlikely when better acquainted with, will supersede many of its other combinations, in the treatment of several diseases.

The Cinnabar is at present never employed as an internal medicine, being only used for mercurial fumigations; which practice is advised when the mouth, nose, throat, &c, are affected with venereal ulcers; or when the common modes for mercurializing the system have been ineffectually tried.

Notwithstanding all that has been said & written, on the effects of mercury, in either alleviating

a aggr
the hus
would
ct decu
has bee
good or
doubtlej
jurors ap
agency;
to an u
=-fspli
a mede
ignorance
son to
in the
judicia

or aggravating the sufferings of the human family; I think it would be a difficult question to decide, whether it really has been productive of most good or evil. Thousands have doubtless been rescued from the jaws of death, by its salutary agency; & thousands been hurried to an untimely grave, by its mis=application. But the fact of a medicine beeings abused, through ignorance, can be no valid objection to its employment, when in the hands of cautious and judicious men. —

Case

Cinchonal

in

Intermittent Fever

by

Chas. A. Wahl

Resident

Pennsylvania